

BA 240 -- Statistical Analysis
~ Summer 2015 Course Syllabus ~

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| General Information | Sections: 5496 OAS Time: Self-Arranged |
| Contact and Office Hours | Telephone: 425-564-2825 Email: Please use Canvas Mail <u>Make sure you put down BA 240 in the subject. (I have multiple classes to track through Canvas)</u> Mailbox: D110 Office Location: C207 I (Letter "I") Office Hours: By Appointment Only Website: You may find all required course documents at: - http://bc.instructure.com |
| Required Texts and Materials | <u>Statistics</u> Tenth Edition, by McClave and Sincich, Prentice Hall 2006 Note: Textbook is available for RENTAL ONLY @ BC Bookstore! Assistance on Excel: Excel for Statistics by Leslie Lum (available on website) Assistance on Calculator: BasicStat.html (available on website) |
| Other Requirement | Calculator that can calculate standard deviations (e.g. TI-83) and media to save files from lab (e.g. USB Flash Drive). |
| Prerequisite | <ul style="list-style-type: none">• MATH 138 (prev MATH 156)• MATH 142 (prev MATH 120)• Intermediate computer skills and prior experience with Word, Excel and PowerPoint is highly recommended. |
| Topics | Chapter 1: Introduction Chapter 2: Descriptive Statistics Chapter 3: Probability Chapter 4: Discrete Distribution Chapter 5: Continuous Distribution Chapter 6: Sampling Distribution Chapter 7: Confidence Interval Chapter 8/9: Hypothesis Testing (One Sample/Two Samples) Chapter 11/12: Regression Analysis (Simple/Multiple) Chapter 10: Analysis of Variance (Depends on Time Availability) |
| Resources | Check Course Website Frequently! Course Documents (including Syllabus, Updated Schedule, Lecture Notes, Homework and Quizzes Solutions, Practice Exams and Project Information) will be posted regularly. Tutors are available in the Business, Economics Study Center (BESC) @ D-204, schedules will be announced shortly (usually during the 2 nd week of the class). This course requires that you demonstrate and develop your writing and research skills. We recommend that you consult the Reading/Writing lab |

<http://www.bellevuecollege.edu/writinglab/> with the drafts of your assignments and that you make use of the Library Media Center <http://www.bellevuecollege.edu/lmc/> in doing research.

Division Policies and Procedures: <http://bellevuecollege.edu/socsci/policies.asp>

How to succeed in this course

- **Read** lecture notes, **Review** the textbook, **Watch** the video lectures.
- **Study in groups** and **start early** on homework assignments and projects.
- Use **Discussion** as much as possible for your questions, this way, you may get answers faster from your classmates or the instructor.
- Make good use of the resources (solution manual, available documents and resources in course website).
- Homework assigned is a **minimum** and must be turned in **ON TIME**. You need to do more exercises (particularly the chapter review problems) on your own in order to be successful in this class.

Course Requirements:

***** **IMPORTANT NOTES** *****

This is a TIGHTLY-SCHEDULED and FAST-PACED course, the later materials are built on top of the previous materials and get harder and harder and we have no time to take a break or revisit material – it is VERY HARD to catch up if you slack off. For the first 1/3 of the course, we will cover TWO to THREE chapters per week. Then slow down to ONE chapter a week as the materials get much complicated after Chapter 7. The last week will be busy with Team Project. (See “Recommended Study Schedule” for details.

An online class does not reduce any course requirements. Instead, it only offers you the flexibility of creating your own learning schedule. Make sure you manage your time well!!

ALL due dates are posted under Canvas Calendar. Students will not be given extension(s) unless they have extenuating circumstances as decided by the instructor, and student must contact the instructor 48 hours before the due date to make such arrangements.

There is a significant amount of work in this class. You can expect to spend a minimum of 15 hours per week to study and to complete the assigned work. Make sure that you can spend at least that much time this quarter. If you are overloaded with other courses or work, this may NOT be the right time for you to take this class. DO NOT OVERLOAD!!

You are expected read the course documents, textbook, books 24x7, tutors and Web resources, and use the discussion and chat tool to seek assistance from classmates and the instructor. DO NOT post files that are assigned as homework to the discussion area unless specifically directed to do so.

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| Attendance: | 50 hours minimum |
| Assignments: | 100 points |
| Discussions: | 110 points |
| Quizzes: | 90 points |
| Project: | 200 points |
| Exams: | 300 points |

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| Final: | 200 points |
| Total | 1000 points |

Attendance (50 hours minimum)

This class requires 50 hours minimum attendance on Canvas. This includes but is not limited to reading the course documents, spending on discussions, using email and chat.

FYI, the average time spent on Canvas for those who passed the course is 75 hours.

Assignments (Total Points = 100)

There are 10 homework assignments; each assignment contains 5 textbook questions (except homework 2). **Before you start the homework, make sure you read the lecture notes (to get a general outline), read the textbook (for details and more explanations) and watch the video lecture (for chapter review/main points).** You may find the assigned reading assignments and homework problems at the LAST couple slides (the one before the “END”☺) of each chapter lecture notes.

Note 1: Since our textbook has some print errors, **make sure you treat lecture notes and video lecture as the “model” if there is any “conflict” between the textbook and the lecture notes.**

Note 2: For lecture purpose, the slides in the video lecture are generally MORE than the PowerPoint slides posted under lecture notes folder. **Make sure you have the lecture notes ready when watching the video lectures, and be sure to take MORE NOTES!!**

Note 3: **DO NOT expect to start reading the materials on the due date and still be able to finish the assignment on time.** Some chapters take over a week in a traditional on-ground setting class (over 6 lecture hours plus exercises and self-study time). *Please see “Recommended Study Schedule” (under Module → Getting Started) for details .Make sure you manage your time well!!*

You may either hand write or type your homework in Word. If you choose to handwrite, scan your work or take picture(s) of your work (**please make sure each picture can be viewed COMPLETELY and CLEARLY**) after you complete it by hand. Then **insert all your images into a SINGLE Word Document (or PDF)**, so that you will only need to submit **ONE file**. Also, be sure to change the file property as indicated in the Announcement. Submit your work as attachments through Assignments under the Course Tools. **Only the following file formats will be accepted: .doc/.docx or .pdf**

Lateness: Any work received after the due date is considered late. **Late work will be penalized at the rate of TWO (2) points per calendar day late, including weekends/holidays, for a maximum of THREE (3) calendar days.** Students will not be given extensions unless they have extenuating circumstances as decided by the instructor (you must contact me **48 hours before** the due date to make such arrangements).

Since extreme circumstances do occur in everyone's life, each student will have a total of **3 FREE late days**:

- 1) A free late day allows you to submit an assignment up to 24 hours late without penalty. For example, you could submit an assignment due Tuesday 9pm on Wednesday by 9pm with no penalty by spending 1 free late day.
- 2) You may choose to use the late days in any way you desire. For example, you could use 2 late days on Assignment 2 and 1 late day on Assignment 5, or spending all 3 on Assignment 7.
- 3) Late days are counted by **CALENDAR DAY**, each late day may only apply to **ONE assignment**, and may **ONLY** be used on **homework and/or individual report** (**NOT** applicable on Discussion, Quiz, team report, and/or extra credit assignments).
- 4) Once a student has used up all 3 free late days, normal late penalty applies. **Note: If you would like to use your free late days, you must add a note along with the assignment submission. For example, put down "I would like to use one of my three free late days" under submission comment.**
- 5) **NO credit** will be given after the homework solution has posted, regardless how many free late days you have left.

Resubmission: **Students are solely responsible on the assignment submission.** You may take back the assignment and resubmit it **BEFORE** the due date with no penalty. If you would like to resubmit an assignment **AFTER** the due date due to whatever reason (i.e., wrong file, updated work etc.), free late days will be taken off if you have any left, and normal late penalty applies if all free late days have been used up.

If an assignment asks you to include a **SKETCH** or a **DIAGRAM** as part of your answer, **PLEASE DO SO!!** Failure of including required diagrams will result in an automatic **loss of 50% of the credit** for that problem). **Diagrams do not need to be elaborate—a program like paint will produce perfectly "adequate" graphics for these HW assignments. Hand drawing is also acceptable.**

Note: It is very helpful to have the Student Solution Manual on hand. (try to do the problems on your own first) – but be sure to realize that there are a number of print errors in the solution manual, so if your answer does not agree with the answer in the manual, do not just assume that your answer is the incorrect one.

Discussion (Total Points = 110)

For each assignment, there will be a follow-up discussion: pick **ONE** question from the homework assignment (the one you are mostly interested in), write a short paragraph to explain 1) why you are interested in it 2) how did you approach this question, solve it, and overcome any difficulties you had 3) what have you learned from this question and any comments. (Alternatively, you may also choose the other option, create your own problem! ☺) You are also required to interact with your classmates in discussion – reply to at least three others' posts. **Don't hold until the last minute, post as early as you could! This is an effective way for reviewing the homework and preparing the quiz.** In addition, you will have the very first discussion (Discussion 0) as student introduction. **No late discussion posts will be accepted.**

Quizzes (Total Points = 90)

Quizzes, also known as Assignment Quizzes, must be taken at scheduled times — **No make-up quizzes are allowed.** There are EIGHT quizzes, and each quiz worth 10-20 points. **Please note that you need to download the quiz file (from Modules) BEFORE taking the quiz.** You may complete it by hand first, then go back to the Canvas Quiz to fill in your answers and get graded (1 hour limit). **The quizzes are essential for preparing the Exams.** In addition, you will have a Quiz 0 and a Quiz Practice, which to help you get familiar with the Canvas grading system. **You should complete Quiz 0 and Quiz Practice AFTER you read all materials under Getting Started folder, but BEFORE you take any other quizzes.**

Note 1: Although there is no time limit when you complete the Quiz File by hand, **in order to better prepare the exams, you should time yourself and be able to complete any quiz within 30 minutes**

Note 2: All quizzes are graded by the Canvas system automatically – which is quite picky and sensitive. I have prepared detailed notes/instructions for each quiz; please **follow the instructions on the quiz file and the notes under each quiz, including the PRECISION and the FORMAT of your answers. The computer is set to ONLY accept answers in the SPECIFIED formats. Part of the requirements in this class is attention to the details, and this is an important skill to have.**

Project (Total Points = 200)

Project has THREE parts:

- 1) **Team Contract (10 Points):** Gather in groups (each group may contain 2-4 team members). Select a data set that satisfies the requirements. Split up work evenly and complete the Team Project Contract. See **Sample Team Contract** for more information (posted under **Modules → Project Part 1**).
- 2) **Individual Report (90 Points):** Each team member chooses ONE variable (NO two team members may obtain the SAME variable). Do a basic descriptive statistics analysis on your chosen variable using EXCEL, and complete a report individually. See **Excel Demos and Sample Individual Report** for more information (posted under **Modules → Project Part2**). **Late work will be penalized at the rate of 15 points per day late, including weekends, for a maximum of THREE calendar days. After the third late day, no late work will be accepted.**
- 3) **Team Report (100 points):** Work in teams, complete a multiple regression analysis using EXCEL, and complete ONE group report. **No late team report will be accepted.**

Note: You DO NOT have to meet in person in order to complete this team project. Please use TELECOMMUNICATION resources as much as possible, such as online chat, phone, email, etc. Teamwork is very important in real life!

Exams (Total Points = 300)

There will be two **PROCTORED EXAMS** given at BC main campus, at approximately the 4th and 8th week. **Exam 1 covers Ch 1 through Ch 4, and Exam 2 covers Ch 5 through Ch 8.** Exams are closed book, closed notes. **ONLY TWO Standard Letter Size (8.5" x 11") cheat sheets will be allowed (4 pages).** Two or three different time slots will be offered for each proctor exam, on Friday evening and Saturday morning (and/or afternoon) usually (detailed exam schedule will be posted during the first week), please check the Canvas Calendar for details. **Make sure you SIGN-UP with ONE slot at least 72 hours prior to the exam** (Sign-up sheet link will be available at Course site). Exam information/instruction usually will be posted under Discussion board approximately one week prior to the actual schedule exam.

No make-up exams are allowed, however, alternative exam may be scheduled ahead of time with at least 72 hours prior to the actual exam schedule.

Final (Total Points = 200)

Final exam will be the common assessment of the program; it will be **proctored** at BC main campus. Exam information/instruction usually will be posted under Discussion board approximately one week prior to the actual schedule exam. Two or three different time slots will be offered, on Friday evening and Saturday morning (and/or afternoon), please check the Canvas Calendar for details. **Make sure you SIGN-UP with ONE slot at least 72 hours before the exam** (Sign-up sheet link will be available at Course site).

No make-up exams are allowed, however, alternative exams may be scheduled ahead of time with at least 72 hours prior to the actual exam schedule.

Final exam is cumulative, but 80%+ covers the materials after Exam 2.

Note: if you are located outside of the local area (>50 miles away from BC) OR have extraordinary situations, you may fill out the "Off Campus Proctor Exam Request Form" (posted under **Modules → Getting Started**), and fax the form to 425-564-3108 Attn: Winnie Li. **Please note the last day to submit the form on Calendar.** Once your request is approved, you may take the exams and final at your local area with an **eligible testing center.**

Grading

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| 925 – 1000 | A | 4 |
| 900 – 924 | A- | 3.7 |
| 875 – 899 | B+ | 3.3 |
| 825 – 874 | B | 3.0 |
| 800 – 824 | B- | 2.7 |
| 775 – 799 | C+ | 2.3 |
| 725 – 774 | C | 2.0 |
| 700 – 724 | C- | 1.7 |
| 675 – 699 | D+ | 1.3 |
| 600 – 674 | D | 1.0 |
| Below 600 | F | 0 |

Note 1: A passing grade will not be given unless **all requirements** of the course are completed.

Note 2: In order to be fair to everyone, **NO GRADE NEGOTIATION!!**

**The Meaning of
Grades Earned in
This Class**

“A” GRADES INDICATE “OUTSTANDING” ACHIEVEMENT

The A student:

Demonstrates consistent mastery of leading outcomes for the course; demonstrates ability to interpret, integrate, and apply learning outcomes beyond the context of the course through application of critical and creative thinking skills; completes work assignments that consistently exceed requirements and that interpret and apply objectives in new, unique, or creative ways; demonstrates consistent leadership in class participation activities.

“B” GRADES INDICATE “HIGH” ACHIEVEMENT

The B student:

Demonstrates a high level of competence in learning outcomes for the course; demonstrates ability to interpret, integrate, and apply learning outcomes within the context of the course through application of critical and creative thinking skills; completes work assignments that consistently meet most requirements; demonstrates regularly to class participation activities.

“C” GRADES INDICATE “SATISFACTORY” ACHIEVEMENT

The C student:

Demonstrates a satisfactory level of competence in learning outcomes for the course; demonstrates competent ability to interpret, integrate, and apply learning outcomes within the context of the course; completes work assignments that satisfy minimum requirements for the course; satisfies minimum requirements for class participation activities.

“D” GRADES INDICATE “POOR” ACHIEVEMENT

The D student:

Demonstrates minimum competence in some learning outcomes for the course; completes work assignments that usually meet minimum requirements for the course; contributes inconsistently or infrequently to class participation activities.

“F” GRADES INDICATE “UNSATISFACTORY” ACHIEVEMENT

The F student:

Typically doesn't do much work, rarely shows up, and doesn't drop the course by the deadline; cannot demonstrate competence in many or fundamental learning outcomes; does not complete the assigned work or submits work that does not meet minimum requirements; does not satisfy minimum requirements for attendance or contribution to class activities.

**Special
Accommodations**

The Disability Resource Center serves students with a wide array of learning challenges and disabilities. If you are a student who has a disability or learning challenge for which you have documentation or have seen someone for treatment and if you feel you may need accommodations in order to be successful in college, please contact us as soon as possible.

Student requiring any special accommodations for the class should make arrangements at the beginning of the term through the DRC at B132. See details at <http://bellevuecollege.edu/drc/>

**Policy Regarding
Plagiarism,
Stealing and
Cheating**

Cheating includes, but is not limited to:

- Turning in assignments or papers or tests/quizzes that have been used in other classes, including a previous enrollment in this class by you or another person.

- Copying answers on any written or practical exam/quiz
- Glancing at nearby exams.
- Two different people working together on the same assignment and submitting the same file from each person as individual work
- Giving and/or receiving help during an exam/quiz
- Disk copying, purchasing/selling answers to any portion of the course
- Misrepresenting file creation dates in any way
- Lack of reference for the source of cited information
- Copying information for written work and representing it as your writing

Stealing includes, but is not limited to, taking the text, notes, exams, library books or other personal property of others without their permission.

Plagiarism is presenting the words, ideas, and/or work of others as if it is an individual's own work. It includes, but is not limited to, using other's papers as one's own and including parts of published works without giving credit where credit is due.

If you choose to cheat, steal or plagiarize, one or more of the following actions will be taken:

- You will receive a zero for the assignment.
- You may receive a failing grade for the course.
- A report of the incident will be forwarded to the Program Chair and the Dean of Student Services. He/she may file the report in your permanent record and/or take further disciplinary action.

If you feel you have been unfairly accused of any of the above, you may appeal. For a description of due process, see WAC 132H-120, available in the Dean's office.